

**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2021-89-E  
DOCKET NO. 2021-90-E**

In the Matter of:	)	
	)	
Duke Energy Carolinas, LLC's and Duke	)	<b>JOINT APPLICATION OF DUKE</b>
Energy Progress LLC's Avoided Cost	)	<b>ENERGY CAROLINAS, LLC</b>
Proceeding Pursuant to S.C. Code Ann.	)	<b>AND DUKE ENERGY</b>
Section 58-41-20(A)	)	<b>PROGRESS, LLC</b>

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Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and, together with DEC, the "Companies"), by and through counsel, hereby submit this Application to the Public Service Commission of South Carolina ("Commission") pursuant to S.C. Code Ann. § 58-41-20(A) and Commission Order No. 2021-257, for approval of the following:

- The Companies' continued application of the peaker methodology to calculate DEC's and DEP's avoided cost rates, as approved in Order No. 2019-881(A) ("2019 Avoided Cost Order");
- DEC's and DEP's updated Standard Offer, as defined in S.C. Code Ann. § 58-41-10(15), which includes the Companies' respective Schedule PP (SC) Purchased Power tariffs ("Standard Offer Tariff" or "Schedule PP"), Terms and Conditions for the Purchase of Electric Power ("Standard Offer Terms and Conditions" or "Terms and Conditions"), and Standard Offer power purchase agreement ("Standard Offer PPA") available to all qualifying cogenerators and small power production facilities ("QFs") up to 2 megawatts ("MW") in size;

- DEC's and DEP's updated form of power purchase agreement available to small power producer QFs that are not eligible for the Standard Offer ("Large QF PPA") and Large QF Tariff; and
- DEC's and DEP's updated notice of commitment to sell form ("Notice of Commitment Form").

Through this Application, DEC and DEP are seeking Commission approval of each of the above-listed documents as specifically required by Act 62. Act 62 also expressly requires that the decisions made by the Commission in this proceeding comply with Section 210 of the Public Utility Regulatory Policies Act of 1978 ("PURPA") and the Federal Energy Regulatory Commission's ("FERC") regulations implementing those provisions.<sup>1</sup> Additionally, Act 62 requires the Commission's decisions in this proceeding to "strive to reduce the risk placed on the using and consuming public."<sup>2</sup> The Commission's 2019 Avoided Cost Order recognized that "[t]he risk of PURPA implementation exists for electrical utility customers, in part, because customers are responsible for paying the cost of all power purchased from QFs through the annual fuel factor."<sup>3</sup> See S.C. Code Ann. § 58-27-865.

The Companies' 2021 Application to implement PURPA and the requirements of Act 62 adheres to the directives in the 2019 Avoided Cost Order, as modified in certain respects by Order No. 2020-315 ("2019 Avoided Cost Order on Reconsideration") and further discussed herein.

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<sup>1</sup> S.C. Code Ann. § 58-41-20(A). As the Commission is aware, the FERC recently amend its applicable regulations implementing PURPA. See *Qualifying Facility Rates and Requirements*, Order No. 872, 85 Fed. Reg. 54,638, 54,702 (Sept. 2, 2020), 172 FERC P 61,041 (2020) ("FERC Order No. 872").

<sup>2</sup> *Id.*

<sup>3</sup> See 2019 Avoided Cost Order, at 24.

In support of this Application, DEC and DEP respectfully show the Commission the following:

1. The Companies' general offices are at 550 South Tryon Street, Charlotte, North Carolina, and their mailing address is:

Duke Energy Carolinas, LLC  
PO Box 1321 (DEC 45A)  
Charlotte, North Carolina 28201-1006

Duke Energy Progress, LLC  
410 South Wilmington Street  
Raleigh, North Carolina 27601-1849

2. Legal counsel for the Companies in this proceeding are as follows:

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and

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<sup>4</sup> Mr. Breitschwerdt is not admitted to practice in South Carolina and is seeking authorization to appear *pro hac vice* before the Commission in this proceeding.

3. Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

# **I. INTRODUCTION AND BACKGROUND ON ACT 62 AND SOUTH CAROLINA'S IMPLEMENTATION OF PURPA**

## **A. PURPA's Mandatory Purchase Obligation and the Standard Offer Requirements**

4. Pursuant to Sections 201 and 210 of PURPA, electric utilities such as DEC and DEP are required to offer to purchase electric energy from qualifying cogeneration and small power production facilities or "QFs."<sup>5</sup> This is known as the "mandatory purchase obligation" under PURPA. Pursuant to S.C. Code Ann. § 58-27-865, the customers of electric utilities are responsible for paying for all power purchased from QFs.

5. PURPA requires that the rates electric utilities pay to purchase QF energy shall not exceed the electric utilities' "avoided costs," which PURPA defines as the incremental cost to the electric utility of the electric energy, which, but for the purchase from such QFs, such utility would generate or purchase from another source.<sup>6</sup> PURPA also requires that the rates for purchases of QF power be set in a manner that is just and reasonable to the utility's customers, in the public interest, and nondiscriminatory towards QFs.<sup>7</sup>

6. In enacting PURPA, Congress directed FERC to prescribe regulations to encourage the development of QFs under PURPA, and delegated to state commissions the responsibility of implementing FERC's regulations, including PURPA's mandatory purchase obligation.<sup>8</sup> In 1980,

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<sup>5</sup> See 16 U.S.C. § 824a-3(a).

<sup>6</sup> 16 U.S.C. § 824a-3(b), (d).

<sup>7</sup> 16 U.S.C. § 824a-3(b)(1); (2); *see also* 2019 Avoided Cost Order, at 21-23 (providing overview of PURPA framework and mandatory purchase requirement).

<sup>8</sup> See 16 U.S.C. § 824a-3(f); *see also FERC v. Mississippi*, 456 U.S. 742, 750-51, 102 S.Ct. 2126 (1982).

FERC issued its rulemaking order, Order No. 69, establishing regulations to implement PURPA.<sup>9</sup> Amongst FERC's regulations to implement PURPA, FERC prescribed additional details regarding electric utilities' obligation to purchase energy and capacity made available by QFs, including expressly prescribing that electric utilities shall not be required to pay more than the avoided costs for purchases from QFs.<sup>10</sup>

7. FERC also recognized in Order No. 69 that smaller QFs could be challenged by the transactional costs of bilaterally negotiating individualized rates with electric utilities, and required states implementing PURPA to make standard rates and terms available to QFs that are 100 kilowatts ("kW") and smaller.<sup>11</sup> FERC's regulations also provide that states "may" put into effect standard rates for purchases for QFs larger than 100 kW, explaining "that the establishment of standard rates for purchases can significantly encourage cogeneration and small power production, provided that these standard rates *accurately reflect the costs* that the utility can avoid as a result of such purchases."<sup>12</sup> Thus, in setting the mandatory purchase obligation requirements under its regulations, FERC mandated that standardized avoided cost rates should be made available to small QF generators of 100 kW or less (which became known as the "standard offer"), while leaving it to the implementing states and state commissions to determine whether to set standardized avoided cost rates for QF generators sized greater than 100 kW. As discussed further below, Act 62 extends the 100 kW minimum for the standard offer established in FERC's regulations to apply to QFs that are 2 MW or smaller.<sup>13</sup>

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<sup>9</sup> *Final Rule Regarding the Implementation of Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, FERC Stats. & Regs. ¶30,128, (1980) ("Order No. 69") (establishing regulations to implement PURPA).

<sup>10</sup> See 18 C.F.R. § 292.303(a); 18 C.F.R. § 292.304(a)(2).

<sup>11</sup> See Order No. 69, at 12,223; 18 C.F.R. § 292.304(c).

<sup>12</sup> 18 C.F.R. § 292.304(C)(2); *Order No. 69*, at 12,223 (emphasis in the original).

<sup>13</sup> S.C. Code Ann. § 8-41-10(15).

8. In 2020, FERC issued Order No. 872 revising its regulations implementing PURPA's mandatory purchase obligation "based on demonstrated changes in circumstances since [its] PURPA Regulations were first adopted to ensure that the regulations continue to comply with PURPA's statutory requirements established by Congress."<sup>14</sup> Order No. 872's recent modifications to FERC's regulations implementing PURPA provide additional options to utilities and state regulatory authorities in implementing the mandatory purchase obligation requirements of PURPA that "are designed to benefit QFs, purchasing utilities, and electric consumers."<sup>15</sup> The Companies are continuing to evaluate how and/or whether to incorporate the new options available under Order No. 872, in light of Act 62's prescriptive requirements for PURPA implementation in South Carolina, and may propose changes in accordance with Order No. 872 in future PURPA-related proceedings.

**B. Implementation of PURPA in South Carolina**

9. Since the 1980s, this Commission has implemented PURPA by overseeing and approving DEC's and DEP's standard offer tariffs, while instructing the Companies to meet the Companies' mandatory purchase obligation requirements by negotiating PPAs with QFs not eligible for the standard offer at the Companies' then-current avoided costs.<sup>16</sup>

10. The recent enactment of Act 62 prescribes a new biennial review and approval process for the Commission to administer PURPA implementation in South Carolina.<sup>17</sup> While the Commission has always had the exclusive authority and responsibility to oversee the State's implementation of PURPA in compliance with the regulations established by FERC, Act 62 sets

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<sup>14</sup> FERC Order No. 872, at P 20.

<sup>15</sup> *Id.* at P 28; *see also* 18 C.F.R. § 292.304.

<sup>16</sup> *See Order No. 81-214*, at 8, 9, 20.

<sup>17</sup> *See* S.C. Code Ann. § 58-41-20.

a specific procedural framework through which the Commission must consider these issues. Also, while the Commission's review of the Companies' PURPA implementation prior to Act 62 has been specific to the standard offer, Act 62 expressly requires the Commission to review and approve form PPAs for QFs not eligible for the Standard Offer ("Large QFs"). Additionally, Act 62 requires the Commission to approve a standard notice of commitment to sell form available to all small power producer QFs as part of the State's PURPA implementation framework.<sup>18</sup>

11. Act 62 does not modify the foundational requirements of PURPA and defines "avoided cost" consistently with FERC's implementing regulations.<sup>19</sup> In fact, Act 62 mandates that South Carolina's PURPA implementation must be "consistent with PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders," expressly requiring that the Commission's determination of the mandatory rates for purchase from QFs shall be "just and reasonable to the ratepayers of the electrical utility, in the public interest . . . and nondiscriminatory to small power producers."<sup>20</sup> In addition, Act 62 further prescribes that the Commission's implementation of PURPA in South Carolina "shall strive to reduce the risk placed on the using and consuming public."<sup>21</sup>

12. In sum, Act 62 directs the Commission to review each South Carolina electric utility's avoided cost rates and PURPA implementation every two years beginning six months from the Act's effective date, specifically including approving the utility's "standard offer, avoided

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<sup>18</sup> S.C. Code. Ann. § 58-41-20(A),(C),(D).

<sup>19</sup> S.C. Code. Ann. § 58-41-20(A); *see also* 18 C.F.R. § 292.304(A).

<sup>20</sup> S.C. Code. Ann. § 58-41-20(A).

<sup>21</sup> *Id.*

cost methodologies, form contract power purchase agreements, commitment to sell forms, and any other terms or conditions necessary to implement this section.”<sup>22</sup>

**C. The Commission’s 2019 Order Approving DEC’s and DEP’s Avoided Cost Rates, Methodology, and Contracting Documents**

13. In 2019, the Commission initiated the first proceedings to implement PURPA in South Carolina under Act 62. In Order No. 2019-881(A), as modified on reconsideration by Order No. 2020-315, the Commission approved the Companies’ avoided cost methodology; avoided cost rates; Standard Offer Tariffs, PPA, and Terms and Conditions; Large QF PPA; and Notice of Commitment to Sell Form, all of which became effective November 30, 2018. The 2019 Avoided Cost Order presented 34 findings of fact and supporting discussion and conclusions detailing the manner in which the Companies should implement PURPA in South Carolina under the new requirements of Act 62.<sup>23</sup> The Commission also recognized the interrelation between ratepayer impacts and the cost of renewable energy and emphasized that “with an accurate avoided cost, the consumer does not pay more for electricity even though the power was purchased rather than generated by the utility.”<sup>24</sup>

**II. EXHIBITS FILED IN SUPPORT OF APPLICATION**

Pursuant to the requirements of Act 62, and as further discussed and supported herein, the Companies submit the following exhibits for Commission approval:

- DEC Exhibit 1 presents clean and redlined copies of DEC’s updated Schedule PP Standard Offer Tariff.
- Confidential DEC Exhibit 2 presents the supporting calculations for the energy and

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<sup>22</sup> *Id.*

<sup>23</sup> 2019 Avoided Cost Order, at 27-35.

<sup>24</sup> *Id.* at 3.



capacity credits, inflation rates, and discount rates used to derive DEC's updated avoided capacity and energy cost rates. Certain information included in Exhibit 2 is designated Confidential and is being filed under seal.<sup>25</sup>

- DEC Exhibit 3 presents DEC's Standard Offer PPA available to QFs eligible for Schedule PP.
- DEC Exhibit 4 presents DEC's Standard Offer Terms and Conditions for the Purchase of Electric Power.
- DEC Exhibit 5 presents clean and redlined copies of DEC's updated Large QF Tariff;
- DEC/DEP Exhibit 6 presents clean and redlined copies of the Companies' updated Notice of Commitment Form;
- DEC/DEP Exhibit 7 presents clean and redlined copies of the Companies' updated Large QF PPA; and.
- DEC/DEP Exhibit 8 presents additional analytical support for the avoided energy cost rate periods, as directed in the 2019 Avoided Cost Order<sup>26</sup>, as well as analytical support for the avoided capacity cost rate design.

DEP Exhibits 1-5 present the same information for DEP as described above for DEC. DEC/DEP Exhibits 6-8 are being filed for approval by both Companies. The Companies further address the updates presented in these Exhibits to this Application in Parts III through VII that follow.

<sup>25</sup> The Companies' Request for Confidential Treatment of DEC Exhibit 2 and DEP Exhibit 2 is contained in the transmittal letter filed contemporaneously with this Application.

<sup>26</sup> 2019 Avoided Cost Order, at 75.

### **III. AVOIDED COST RATES FOR QF PURCHASES**

#### **A. Avoided Cost Methodology**

14. Act 62 directs the Commission to review and approve the methodology that the Companies use to establish avoided energy and capacity cost rates offered to QFs—including QFs eligible for the Standard Offer Tariff as well as Large QFs—to ensure that it fairly accounts for costs avoided or incurred by the Companies, “including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers[.]”<sup>27</sup>

15. In both South Carolina and North Carolina, the Companies have historically applied the “peaker methodology” to quantify each utility’s avoided cost, and this methodology continues to be reasonable and appropriate for calculating DEC’s and DEP’s forecasted avoided costs as presented in this proceeding.

16. The peaker methodology is generally accepted throughout the electric industry as a fair, reasonable, and accurate means by which to calculate avoided costs. The peaker methodology was recognized as an acceptable method for determining avoided cost in the widely relied-upon *PURPA Title II Compliance Manual* published by the National Association of Regulatory Utility Commissioners (“NARUC”), the Edison Electric Institute, and other industry organizations.<sup>28</sup>

17. This Commission recently found that the peaker methodology is “a reasonable and appropriate methodology to fully and accurately quantify DEC’s and DEP’s forecasted capacity and energy cost to be avoided by purchases from QFs.”<sup>29</sup> The North Carolina Utilities

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<sup>27</sup> S.C. Code Ann. §§ 58-41-20(A), 48-41-20(B)(3).

<sup>28</sup> Robert E. Burns & Ken Rose, “PURPA Title II Compliance Manual” at 35 (March 2014) (“PURPA Title II Compliance Manual”), available online at: <https://www.naruc.org/our-programs/resources/> (last visited Aug. 11, 2019).

<sup>29</sup> 2019 Avoided Cost Order, at 29.

Commission has also consistently approved the Companies' use of the methodology in a number of prior avoided cost proceedings.<sup>30</sup>

18. The peaker methodology determines a utility's marginal capacity cost and marginal energy cost, and is designed to ensure that purchases from new QF generators are not more expensive than the avoided capacity cost of a simple cycle combustion turbine ("CT") or "peaker" unit plus the utility's forecasted avoided system marginal energy cost. In this way, consistent with PURPA, the peaker methodology provides an appropriate and reasonable estimate of the utility's forecasted avoided or incremental costs of alternative energy that the utility would have otherwise incurred but for the purchase from a QF facility.

19. The Companies' application of the peaker methodology appropriately captures all avoidable marginal capacity and energy costs that consumers would otherwise pay "but for" the purchase from the QF and, as such, appropriately leaves the consumer indifferent to purchasing QF generation relative to the utility generating or purchasing alternative energy from another source. The Companies rely upon several key elements in the application of the peaker methodology to accurately align the avoided capacity cost rates that customers ultimately pay with the actual value of the capacity delivered by the QF to the utility. These elements include: (a) calculating the annualized avoided capacity cost of a CT<sup>31</sup>; (b) determining the year in which each utility has its first avoidable capacity need based upon DEC's and DEP's most recently filed 2020

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<sup>30</sup> See *Order Setting Avoided Cost Inputs*, at 30, NCUC Docket No. E-100, Sub 140 (Dec. 31, 2014) (noting that the peaker methodology is "generally accepted throughout the electric industry to calculate avoided costs" and stating that the NCUC "has long approved the use of the peaker method for the purpose of establishing avoided costs and has repeatedly held that, according to the theory underlying the peaker method, if the utility's generating system is operating at the optimal point, the cost of a peaker (a CT) plus the marginal running costs of the generating system will equal the avoided cost of a baseload plant and constitute the utility's avoided cost.").

<sup>31</sup> See EIA Cost and Performance Characteristics of New Generating Technologies, Annual Energy Outlook 2021, accessible at [https://www.eia.gov/outlooks/aeo/assumptions/pdf/table\\_8.2.pdf](https://www.eia.gov/outlooks/aeo/assumptions/pdf/table_8.2.pdf) (last visited April 19, 2021).

integrated resource plans (“2020 IRPs”)<sup>32</sup>; (c) determining the total avoided capacity cost for the applicable contract term; and (d) applying an appropriate performance adjustment factor in calculating the avoided capacity rate to allow the QF to receive full capacity value if its forced outage rate is equivalent to that of the Companies’ overall generation fleets.<sup>33</sup>

20. In order to most accurately reflect the Companies’ current estimates of DEC’s and DEP’s future capacity needs and projections of future costs that QFs can avoid, the Companies are primarily relying upon data and assumptions from the Companies’ 2020 IRPs.<sup>34</sup> Consistent with the Companies’ 2020 IRPs, DEC’s first avoidable capacity need arises in 2026, while DEP’s first year of avoidable capacity need is 2024.<sup>35</sup>

21. For purposes of implementing the peaker methodology to calculate avoided capacity and avoided energy costs for purposes of this proceeding, DEC and DEP have adhered to the Commission’s methodological directives and guidance issued in the 2019 Avoided Cost Order and 2019 Avoided Cost Order on Reconsideration. To provide reasonable transparency into the Companies’ calculation of DEC’s and DEP’s avoided costs, DEC’s/DEP’s Confidential Exhibit 2 provide additional detail regarding the Companies’ avoided cost methodology and the underlying data, assumptions and results of the application of the peaker methodology to calculate DEC’s and

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<sup>32</sup> The Companies’ 2020 IRPs are pending Commission review in Docket Nos. 2019-224-E and 2019-225-E.

<sup>33</sup> The Companies have calculated updated performance adjustment factors (“PAF”) for DEC and DEP using the same methodological approach approved in the 2019 Avoided Cost Order. The PAF increased from 1.05 to 1.07 for DEC and from 1.05 to 1.08 for DEP.

<sup>34</sup> Consistent with the methodical approach the Companies’ undertake in developing DEC’s and DEP’s updated Large QF avoided cost rates, the Companies have updated certain market costs and other inputs to use more current 2021 data.

<sup>35</sup> For comparison, DEC’s 2019 IRP Update identified that DEC’s next avoidable capacity need would arise in 2026 (no change), while DEP’s first year of identifiable capacity need shifted outward from 2020 to 2024, primarily due DEP procuring short-term contracts for capacity through a solicitation. *See* 2019 Avoided Cost Order, at 83, 90-91; DEP 2020 Biennial IRP, at 112-114; DEC 2020 Biennial IRP, at 111-113.

DEP's avoided cost rates, as contemplated by Act 62.<sup>36</sup> This approach is fully consistent with the methodological approach approved by the Commission in the 2019 in Order Nos. 2019-881(A) and 2020-315.

**B. Avoided Energy and Capacity Rate Design**

22. The Companies' avoided energy and avoided capacity rate design also helps to ensure that avoided cost rates accurately compensate QFs for the value of the energy and capacity they provide to the Companies and customers, consistent with PURPA, FERC's implementing regulations, and Act 62. The Companies' respective avoided energy rate design includes summer, winter and shoulder seasons and designates distinct energy pricing periods to reflect the energy value of QF generation during the different timeframes. Order No. 2020-315 directed the DEC Standard Offer as well as Large QF Tariffs to include eleven energy pricing periods, while DEP's approved Standard Offer and Large QF Tariff includes nine energy pricing periods.<sup>37</sup> Based upon updated information and analysis, DEC proposes adjusting its energy rate design to ten energy pricing periods by consolidating the summer a.m. period with the summer off-peak pricing period. No changes are being proposed to the DEP energy pricing periods. As directed in the 2019 Avoided Cost Order, the Companies are providing additional analytical support for the DEC and DEP avoided cost rate periods in DEC/DEP Exhibit 8 to this Application.

23. The Companies have updated their avoided capacity rate design to reflect the loss of load risk based on the 2020 Resource Adequacy Studies conducted by Astrapé Consulting, LLC ("Astrapé") for DEC and DEP and included in the 2020 IRPs.<sup>38</sup> The DEC pricing periods include

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<sup>36</sup> See S.C. Code. Ann. § 58-41-20(J).

<sup>37</sup> Order No. 2020-315, at 26 (Modifying DEC Standard Offer to incorporate two additional pricing periods).

<sup>38</sup> See DEC 2020 IRP, at Attachment III (Docket No. 2019-224-E); DEP 2020 IRP, at Attachment III (Docket No. 2019-225-E).

winter AM hours for the months of December-March and summer PM hours for July-August. For DEP, the loss of load risk occurs exclusively during winter AM hours for the months of December-March and does not include a summer pricing period. The Companies' rate design also reflects seasonal allocation weightings for capacity payments based on the impact of summer versus winter loss of load risk, as determined by the Companies' 2020 Resource Adequacy Studies. The seasonal allocation for DEC changes from 70% winter / 30% summer approved in the 2019 Avoided Cost Order to 89% winter / 11% summer. The seasonal allocation for DEP changes from 99% winter / 1% summer to now 100% of loss of load risk occurring during the winter season. The updates to the capacity pricing periods and seasonal allocations are consistent with Commission guidance from the 2019 Avoided Cost Order and reflect the marginal value of QF capacity to customers.<sup>39</sup> Supporting details for the changes to the avoided capacity rate design are included in Section II of DEC/DEP Exhibit 8.

### **C. Ancillary Services and Integration Services Charge**

24. Consistent with PURPA, Act 62 defines "avoided cost" to be the "incremental cost of energy or capacity or both" that a utility avoids by making purchases from a QF.<sup>40</sup> However, it goes on to prescribe that the Companies' avoided cost methodology must "fairly account[] for costs" avoided or incurred related to ancillary services in addition to the cost of energy and capacity.<sup>41</sup> Accordingly, in conjunction with developing the Companies' forecasted avoided cost of energy and capacity under the peaker methodology, DEC and DEP commissioned a 2018 study conducted by Astrapé to quantify the incremental ancillary services costs of integrating

<sup>39</sup> See 2019 Avoided Cost Order, at 112 (directing the Companies to calculate avoided capacity costs based upon current conditions).

<sup>40</sup> S.C. Code Ann. § 58-41-20(2).

<sup>41</sup> S.C. Code Ann. § 58-41(20)(B)(3).

intermittent QF solar into the DEC and DEP systems (the “Solar Ancillary Service Study”). That study was filed with the Commission in the Companies’ 2019 avoided cost proceeding, and was designed to quantify the current cost to provide the additional operating reserves or generation “ancillary services” needed to integrate increasing levels of solar QF generation into the DEC and DEP systems.

25. The 2019 Avoided Cost Order approved the Solar Integration Services Charges (“SISC”) of \$1.10/MWh for DEC and \$2.39/MWh for DEP<sup>42</sup> based on existing and committed solar capacity in DEP (2,950 MW) and DEC (840 MW) across each utility’s respective system at the time the 2018 Solar Ancillary Service Study was completed.<sup>43</sup> In approving the SISC, the Commission approved a partial Settlement Agreement between the Companies and certain parties (“SISC Settlement”), which requires the Companies to coordinate and undertake an independent technical review of the methodology and inputs of the 2018 Solar Ancillary Service Study and to include the results of the third-party review and any changes to the SISC in its next avoided cost proceeding. The independent technical review has commenced, but such review is not complete at the time of this Application. The Companies are working with parties to the SISC Settlement to propose an amendment to the SISC Settlement for the Commission’s approval, which will provide flexibility regarding the timing of filing the results of the technical review and the updated SISC.<sup>44</sup>

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<sup>42</sup> The difference in the DEP and DEC cost is largely driven by the significantly greater amount of existing and committed future solar capacity in DEP compared to DEC.

<sup>43</sup> 2019 Avoided Cost Order, at 120-123.

<sup>44</sup> In an oral argument held on March 31, 2021, the Companies discussed with the Commission this timing constraint and the solution of potentially amending the SISC Settlement Agreement. To date, the Companies have received agreement among the parties, in concept, to the SISC Settlement amendment, but the parties have not finalized the amendment to the SISC Settlement. The Companies expect such an amendment to be jointly proposed by the settling parties in the near future.

#### **IV. STANDARD OFFER TARIFF, PPA, AND TERMS AND CONDITIONS**

26. Act 62 defines the term “Standard Offer” as “the avoided cost rates, power purchase agreement and terms and conditions approved by the commission and applicable to purchases of energy and capacity by electrical utilities . . . from small power producers up to two megawatts AC in size.”<sup>45</sup> Act 62 further directs the Commission to approve each electrical utility’s Standard Offer on a biennial basis.<sup>46</sup>

27. DEC’s and DEP’s Standard Offer Tariff, Standard Offer PPA, and Terms and Conditions (which are incorporated into the Standard Offer PPA by reference) represent the contractual mechanisms through which Standard Offer QFs may elect to sell power to the Companies pursuant to PURPA. Schedule PP presents the avoided cost rates available to Standard Offer QFs, which reflects the updated rates and terms supported in Section III of this Application, and continues to provide eligible QFs with variable, 5-year, and 10-year fixed term options.

28. The non-rate terms and conditions of the Standard Offer Tariff, Standard Offer PPA, and Standard Offer Terms and Conditions proposed herein have not changed from those approved by the Commission in the 2019 avoided cost proceeding, with the exception of ministerial changes to the Standard Offer Tariff. The clean and redline forms of the Standard Offer Tariff are shown in DEC’s and DEP’s Exhibit 1. The only changes to the Standard Offer PPA and Standard Offer Terms and Conditions are the designations in the header and footer of the documents, and as such, the Companies are filing only clean versions of those documents, which are DEC’s and DEP’s Exhibit 3 and DEC’s and DEP’s Exhibit 4.

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<sup>45</sup> S.C. Code Ann. § 58-41-10(15).

<sup>46</sup> S.C. Code Ann. § 58-41-20(A).



## **V. LARGE QF PPAs**

29. Large QF PPAs are the form PPAs that the Companies use to contract with QFs not eligible for the Standard Offer (*i.e.*, greater than 2MW) for the purchase of energy and capacity from small power producer QFs under PURPA. Act 62 requires the Commission to review and approve one or more standard form power purchase agreement for use by small power production facilities not eligible for the Standard Offer.<sup>47</sup> Act 62 provides further that such form PPAs should not be determinative of the avoided cost price and length, or “term”, of the power purchase agreement and that each such PPA must be “commercially reasonable.”<sup>48</sup> Act 62 also requires utilities’ form of Large QF PPAs to contain certain commercial terms and conditions, including, but not limited to, force majeure, indemnification, choice of venue, and confidentiality provisions.<sup>49</sup>

30. The Commission approved the Companies’ current Large QF PPA in the 2019 Avoided Cost Order subject to certain modifications.<sup>50</sup> The Large QF PPA includes each of the provisions specified by Act 62 and provides for the exclusive purchase and sale of 100% of the output of energy and capacity from a QF facility on a fixed price, fixed term basis. The Companies have made limited modifications to the Large QF PPA, as proposed herein, to incorporate certain accommodations that have been requested by QFs contracting pursuant to this document over the past 18 months.<sup>51</sup> The Companies are providing a clean and redline version of the Large QF PPA in DEC/DEP Exhibit 7.

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<sup>47</sup> S.C. Code Ann. § 58-41-20(A).

<sup>48</sup> S.C. Code Ann. § 58-41-20(B)(2).

<sup>49</sup> S.C. Code Ann. § 58-41-20(A).

<sup>50</sup> 2019 Avoided Cost Order, at 129-139.

<sup>51</sup> As described in the Companies’ application requesting approval of changes to the generator interconnection process (which were approved by the Commission Directive issued February 10, 2021, in Docket No. 2019-326-E), the

## **VI. LARGE QF TARIFF**

31. Act 62 requires that avoided cost rates offered by an electrical utility to Large QFs “must be calculated based upon the avoided cost methodology most recently approved by the Commission.”<sup>52</sup> In the 2019 Avoided Cost Order on Reconsideration, the Commission directed DEC and DEP to “incorporate the most up-to-date inputs to the avoided energy and avoided capacity rates to reflect future changes to Duke’s integrated resource plans consistent with DEC’s and DEP’s most recently-filed IRPs in calculating the avoided cost rates for Large QFs.”<sup>53</sup> This approach ensures that the avoided cost rates paid to Large QFs accurately reflect the value provided to customers, which, in turn, decreases the risk of customer overpayment in excess of the Companies’ actual avoided cost, consistent with Act 62’s directive for the Commission to strive to reduce the risk placed on the using and consuming public. To promote transparency, the Commission also directed the Companies to prepare and file a tariff that is similar in structure to the Standard Offer, but is to apply to Large QFs.<sup>54</sup> Consistent with this requirement, the Companies each developed a Large QF Tariff presenting the current avoided cost rates available to Large QFs and initially filed the Large QF Tariffs with the Commission on May 15, 2020. DEC and DEP have updated the Large QF Tariff, in the Commission’s E-tariff system, on a quarterly basis, with the most recent updates filed on February 1, 2021.<sup>55</sup>

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Companies have committed to reviewing the Large QF PPA and Notice of Commitment Form with stakeholders to resolve any inconsistencies between these documents and the revised interconnection process. In its application in Docket No. 2019-326-E (filed Nov. 17, 2020), the Companies committed to evaluating these documents with stakeholders and requesting Commission approval for any necessary revisions to these documents within certain time periods relative to the revised interconnection process.

<sup>52</sup> S.C. Code Ann. § 58-41-20(C).

<sup>53</sup> Order No. 2020-315, at 25.

<sup>54</sup> *Id.* at 23.

32. DEC's and DEP's Large QF Tariff presents the avoided cost rates available to Large QFs, which reflects the updated rates and terms supported in Section III of this Application. The Companies have also included ministerial corrections to the non-rate terms and conditions of the Large QF Tariff. DEC and DEP Exhibit 5 provide a clean and redline version of each utility's Large QF Tariff.

## **VII. NOTICE OF COMMITMENT FORM**

33. Act 62 provides that small power producer QFs shall have the right to commit to sell their electric output to an electric utility by executing and delivering to the utility a Commission-approved "notice of commitment to sell form," which must provide the small power producer QF a "reasonable period of time" from the submittal of the form to execute a PPA with the utility.<sup>56</sup> Act 62 likewise prohibits a utility from requiring a small power producer QF to execute a PPA prior to receiving "a final interconnection agreement from the electrical utility" as a condition to "preserving the pricing and terms and conditions established by its submittal of the form to execute a [PPA]."<sup>57</sup>

34. FERC's regulations implementing PURPA's mandatory purchase obligation uniquely provide a QF a right to unilaterally commit itself to deliver energy and capacity over a specified term and, importantly, to bind the utility to purchase the QF's energy and capacity output at the utility's avoided cost rate by establishing what is known as a non-contractual "legally enforceable obligation" ("LEO"). FERC's regulations specify that a QF shall have the option to either deliver energy on an uncommitted and "as available" basis or to establish a LEO, committing to deliver energy and capacity to the utility over a specified term with rates fixed at the utility's

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<sup>56</sup> S.C. Code Ann. § 58-41-20(D).

<sup>57</sup> *Id.*

avoided costs calculated either at the time the LEO is established or calculated at the time of delivery.<sup>58</sup> Where a QF commits itself to deliver energy and capacity, it may elect to either enter into a contractually binding PPA or, where the utility refuses to negotiate in good faith and to enter into a PPA, the QF may rely upon a non-contractual LEO prior to executing a mutually-binding PPA to establish the QF's legally enforceable obligation and rights to the utility's avoided cost.<sup>59</sup> The Notice of Commitment Form is thus intended to provide small power producer QFs with a Commission-approved non-contractual option to establish a LEO under PURPA separate from execution of a contractually-binding PPA.

35. The establishment of a LEO must turn on the QF's commitment to sell its output to the utility over a specified term.<sup>60</sup> The Notice of Commitment Form therefore must establish the QF's binding and substantial commitment to sell the electrical output of its facility in order to establish a LEO and should not provide the QF an uncommitted option to walk away from the PPA negotiations without liability. FERC Order No. 872 recently reinforced these requirements by incorporating a new provision in its regulations that QFs "must demonstrate commercial viability and financial commitment to construct its facility . . . as a prerequisite to a [QF] obtaining a [LEO]."<sup>61</sup>

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<sup>58</sup> See 18 C.F.R. § 292.304(d).

<sup>59</sup> See *Grouse Creek Wind Park, LLC*, 142 FERC ¶ 61, 187 at P 40 (2013) (recognizing that a QF may commit to sell its electric output through execution of a contract, or "if the electric utility refuses to sign a contract, the QF may seek state regulatory authority assistance to enforce the PURPA-imposed obligation on the electric utility to purchase from the QF, and a non-contractual, but still legally enforceable, obligation will be created pursuant to the state's implementation of PURPA") (internal citations omitted).

<sup>60</sup> *JD Wind I, LLC*, 129 FERC ¶ 61,148 at P 25 (2009) (explaining that "a QF, by committing itself to sell to an electric utility, also commits the electric utility to buy from the QF; these commitments result either in contracts or in non-contractual, but binding, legally enforceable obligations.").

<sup>61</sup> See 18 C.F.R. 292.304(d)(3); see also FERC Order No. 872, at PP 684-696. The Companies continue to evaluate the appropriate changes to the Notice of Commitment Form to implement these new requirements, and plan to discuss these issues with stakeholders in connection with the evaluation of this form to align with the interconnection reforms described in footnote 53 *supra*.

36. The Companies' Notice of Commitment Form—applicable to both small power producer QFs eligible for the Standard Offer and Large QFs—proposed herein contains only minor revisions to the delivery instructions for QFs executing the form. The Companies intend to review the Notice of Commitment Form with stakeholders in connection with changes to the Companies' interconnection processes.<sup>62</sup> The Companies are providing a clean and redline version of the Notice of Commitment Form as DEC/DEP Exhibit 6.

### VIII. CONCLUSION

WHEREFORE, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC respectfully request the Commission, pursuant to this Application, and in compliance with the requirements of S.C. Code Ann. § 58-41-20(A) approve the following:

- (1) The Companies' application of the peaker methodology to calculate DEC's and DEP's avoided cost rates;
- (2) DEC's and DEP's Standard Offer Tariff, Standard Offer PPA, and Standard Offer Terms and Conditions;
- (3) DEC's and DEP's Large QF PPA and Large QF Tariff;
- (4) The Companies' Notice of Commitment Form; and
- (5) To provide any further relief the Commission deems to be just and reasonable and in the public interest.

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<sup>62</sup> See footnote 53 *supra*.

Respectfully submitted, this the 22<sup>nd</sup> day of April 2021.



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**CERTIFICATION****Docket No. 2021-89-E****Docket No. 2021-90-E**

I, Glen A. Snider, state and attest, under penalty of perjury, that I have reviewed the foregoing Joint Application of Duke Energy Carolinas, LLC and Duke Energy Progress, and, in the exercise of due diligence, have made reasonable inquiry into the accuracy of the information and representations provided therein; and that, to the best of my knowledge, information, and belief, all information contained therein is accurate and true and contains no false, fictitious, fraudulent or misleading statements; that no material information or fact has been knowingly omitted or misstated therein, and that all information contained therein has been prepared and presented in accordance with all applicable South Carolina general statutes, Commission rules and regulations, and applicable Commission Orders. Any violation of this Certification may result in the Commission initiating a formal review proceeding. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment by contempt.

*Glen Snider*

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Name: Glen A. Snider  
Title: Director Carolinas Integrated Resource  
Planning and Analytics  
Duke Energy Carolinas, LLC  
Duke Energy Progress, LLC